



**United States Department of Agriculture**  
Natural Resources Conservation Service

The background of the cover is a photograph of a rural landscape. It shows rolling green hills in the foreground, a line of trees in the middle ground, and a few farm buildings with red roofs in the distance under a bright blue sky with scattered white clouds.

# **Natural Resources Conservation Service Progress Report and Update To the Fiscal Year 2005 Strategic Plan**





## About This Document

Activities of the Natural Resources Conservation Service (NRCS) are guided by an on-going strategic planning process. The comprehensive 2005 planning effort established a clear line-of-sight between work at the field level and achieving agency mission goals. The 2005 NRCS Strategic Plan, which can be accessed at <http://www.nrcs.usda.gov/about/strategicplan/index.html>, continues to guide us.

This document reaffirms and refines the objectives and strategies identified in the 2005 planning effort to maintain direction and increase performance over the next 5 years. It establishes new targets for the period 2011 to 2015. This document also reports on implementation of the Plan, providing information on progress toward the quantitative targets and performance on management initiatives established in the 2005 Strategic Plan.



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## Message from the Chief

*New challenges, constant values*

NRCS was founded in 1935 and marks 75 years of conservation service to the Nation in 2010. This document summarizes the agency's strategic thinking about its mission and its future as we begin our next 75 years of service to the Nation. The initial plan was developed 4 years ago by a team consisting of State leadership. Their objective was to define the basic values and mission of the agency and provide a framework for activities for decades to come. In that effort they were successful; their framework continues to provide sound guidance as we move forward with a new Administration and a new Farm Bill.



This document reaffirms our continuing mission—helping the people who manage the Nation's soil and water resources to maintain the productive capacity of the resource base and the quality of the environment today and for the future. As indicators of mission performance, this plan sets measurable targets for our activities to help protect soil, water, air, plants, and animals. We must achieve these targets, but more important, we must be sure our efforts to meet our goals result in clear progress toward solving the major natural resource problems that matter to people. Helping to solve real problems, such as hypoxia in the Gulf of Mexico and other coastal waters, will require that we focus on our watershed strategy and facilitate cooperation among many interests—objectives that would also have been familiar to our first Chief, Hugh Hammond Bennett, when the agency was founded in 1935.

Our long-term framework identifies strategic issues—major trends affecting resource use—that are affecting the kinds of help our customers need from us. Strengthening our ability to understand and provide assistance on these issues is a priority. Initiatives for climate change and energy, as well as our mission goal for clean and abundant water support the Secretary's priority of USDA leadership in these areas and respond to Congressional direction in the Farm Bill. Our multi-disciplinary approach to planning is a valuable component of efforts to mitigate the effects of climate change as communities undertake the landscape-scale planning needed to maintain resiliency in ecosystems and hydrologic systems facing increased stress.

Our activities in the next few years will be based on our traditional values, the guiding principles, and the broad strategies described in this plan. But, as Bennett himself taught us, being true to core values does not mean clinging to outdated procedures or organizational structures. Over the next few years, we will change, as needed, to ensure that we have the right people with the right skills in the right places to get conservation on the ground. Internal management initiatives will result in an even stronger agency in which:

- Field office conservationists have access to streamlined processes and integrated tools that enable them to spend more time with customers, focusing on planning and follow-up to maintain conservation on the land after planned practices are applied.
- State and national-level program managers have access to complete, accurate, and timely information on financial transactions, ensuring that taxpayer funds are used efficiently, for the purposes intended, and meet all accountability requirements.
- Individual employees have access to training to maintain mastery of their disciplines, clear and consistent guidance relating to their performance, safe work places, and work environments that respect individual differences and encourage initiative and creative thinking.

As we become more efficient and better organized to meet our mandated responsibilities, we will also become a more effective member of the conservation partnership. Above all, we will be better able to provide high quality, science-based assistance to meet the needs of a customer base that includes traditional customers, members of traditionally underserved groups, new farmers, specialty crop growers, and organic farmers as we move into the next 75 years of conservation in the United States.

## Vision: Productive Lands – Healthy Environment

Americans want both a productive agricultural sector and a high-quality environment. Privately owned cropland, rangeland, pastureland, and forestland form the foundation of a substantial and vibrant agricultural economy that provides food, fiber, forest products, and energy for the Nation. Through careful stewardship, these lands also produce environmental benefits that people desire and need—productive soil, clean and abundant water, clean air, and healthy ecosystems.

America's farmers, ranchers, woodlot owners, and others who manage America's working lands to produce these multiple benefits do not work in isolation. The Nation's landscape is a mosaic of agricultural, forested, natural, developing, and developed areas. With changing land uses, conservation is everyone's business. Agricultural producers, rural residents, and others working together can protect the integrity of the biological and hydrologic processes of the land as they make productive use of its resource base. Communities can use landscape scale planning to retain a viable agricultural presence, rural quality of life, and environmental quality, while making room for needed development and other economic uses of the resource base.

## Mission: Helping People Help the Land

NRCS delivers products and services that enable people to be good stewards of the Nation's soil, water, and related natural resources on private land. We assist land managers and communities to take a comprehensive approach to the use and protection of natural resources.

## Guiding Principles

Three fundamental principles guide how NRCS conducts business today and will continue to conduct business in the future:

**Service** – Our customers are entitled to the best service we can provide. We respect the dignity and worth of every person we work with, treat all individuals fairly and equitably, listen to their views, and respond with assistance tailored to their needs. We continually strive to anticipate the public's needs and improve our service, and we measure our efforts against the highest professional standards.

**Partnership** - Conservation can only be achieved through the cooperative efforts of agencies, organizations, and individuals across the Nation. We value our relationships with other Federal, State, local, and tribal natural resource and cultural agencies and organizations with common objectives. We foster the discussions needed to bring people together in a shared vision for their land and communities.

**Technical Excellence** – Effective stewardship depends on having up-to-date science-based information and technology that is easily accessible and meets user needs. The quality of our science-based information and technology products and services is recognized and acknowledged by customers and peers across the Nation and worldwide. Our employees constantly strive to maintain mastery of their discipline by staying abreast of new developments in science and technology. Managers continue to make appropriate training available to ensure that employees acquire and maintain the skills to be successful.

## Overarching Strategies

Natural resources are inextricably linked, and conservation actions cut across multiple objectives. For convenience, we may analyze natural resource concerns as singular issues; however, we recognize that it is artificial to do so. The real challenge is to bring all the pieces together on the landscape to achieve the larger vision of conservation. In the 2005 Plan, we emphasized three overarching strategies that could be used effectively across resource concerns to accelerate conservation achievements: Cooperative Conservation, the Watershed Approach, and the Market Based Approach.

These overarching strategies, which were built upon the foundation of the agency's 75 years of conservation experience, emphasize locally-led, partnership, and voluntary approaches. As we move forward, we continue to examine opportunities to refine and focus these strategies, encouraging wider participation in conservation efforts and integrating consideration of the larger landscape more fully into every activity. Accordingly, risk management and mitigation are included within these strategies as forces also affecting conservation planning and implementation.

### Cooperative Conservation

Cooperative conservation has been the foundation of conservation efforts in agriculture since the 1930s. The unique Federal-State-tribal-local conservation partnership has grown over time and remains at the core of the conservation delivery system. Originally representing primarily agricultural producers and their natural resource concerns, the partnership has expanded over past decades to include a wider range of natural resource and environmental interests. As units of State and local government have assumed greater responsibilities related to environmental protection and natural resource and cultural conservation, the laws they enact have become a critical component of a comprehensive strategy to address multiple natural resource concerns. Public interest in the environment has grown, and an increasing number of multi-State partnerships and coalitions are setting goals and developing plans to address natural resource priorities in river basins, estuaries, wildlife habitat corridors, or other landscape systems.

The conservation partnership will continue to expand to include new partners with interests and experience in energy and climate change. While these new partners may have little familiarity with agriculture or natural resources, and may have missions that differ from our own, we will work to foster the collaboration needed for conserving our natural resources. Credible analytical tools and data are essential for reaching consensus on objectives. Tools using scale-appropriate modeling enable cooperation among partners with different responsibilities and missions. Effective cooperative conservation requires a greater capacity to share conservation tools and information among partners. The success of cooperative conservation depends on coordinated actions to achieve shared objectives.

## **Watershed Approach**

Maintaining and enhancing the natural systems that support landscape health requires an approach that utilizes boundaries appropriate to the natural resource issues being addressed. Watersheds work well for comprehensive planning because they provide a framework to evaluate the movement of water, nutrients, sediment, and energy through the landscape and address water quality and related concerns. However, the watershed approach can also be applied within other types of landscape boundaries when the resource concern is not confined to a single watershed. When used with cooperative conservation, the watershed approach provides a way to aggregate resources and assists local groups in planning and accomplishing their natural resource goals in a targeted manner. Comprehensive planning helps communities retain a viable agricultural sector by balancing working farm and ranch lands with environmental quality, cultural resource protection, economic development, and other resource base uses.

The foundation of the watershed approach is a natural resources assessment through which stakeholders determine priorities within a defined landscape unit. Natural resource information and modeling capability at multiple scales enable planners to identify priority locations within a planning unit - those areas where conservation actions are most needed, most immediately - and the level of treatment required to improve the resource condition. Information on the effects of conservation measures at a landscape scale and analytical tools to compare conservation options must be readily accessible for the watershed approach to achieve its potential.

To strengthen our watershed planning capabilities, we will enhance the agency's capabilities to provide data at a variety of watershed scales. Utilizing NRCS' multi-disciplinary expertise, we will initiate cross-agency coordination of data, from sharing baseline watershed conditions to measuring the effects of conservation treatment on watershed health. In addition, we will also work with our partners to facilitate watershed-scale planning with local communities and groups.

## **Risk Assessment and Mitigation**

The current economic environment for production agriculture is extremely volatile, with rapid swings in demand and in prices for inputs and commodities produced. Extreme weather conditions have been occurring with unusual frequency in much of the Nation, and climate change has the potential for increasingly more severe conditions. Risk assessment and risk preparedness will be essential to achieving economic and environmental sustainability in this unstable environment.

Although agricultural risk management typically has focused on mitigating economic threats to agricultural viability, natural resources assessment and conservation are key to effective risk management. Accurate and timely information on water supply and soil moisture conditions enables resource managers to assess risks of damage from either drought or flooding and to adjust operations as needed. Adoption of practices, such as water conserving irrigation systems, can reduce economic and environmental risk. Considering weather conditions in scheduling nutrient application can minimize risk of water quality impacts. Many practices applied to reduce erosion or improve grazing land or forest health can mitigate the risk to resource productivity that severe weather or climate change might cause. Though disrupted weather patterns increase risks to the landscape, conservation practices can lessen the severity of those risks.

To provide effective assistance in the current situation, we will manage our portfolio of conservation programs in a comprehensive fashion to help producers avoid and minimize potential risk through sound planning and conservation, mitigate for unavoidable risks, and recover from disasters in order to sustain a viable and robust agricultural sector for the benefit of the Nation. Our risk assessment and mitigation strategy is closely related to both cooperative conservation and the watershed approach. Efforts directed to both risk preparedness and disaster recovery are more effective when communities cooperate to assess their risks and undertake landscape-scale strategies to minimize them.

### **Market Based Approach**

There is widespread demand for affordable food, clean water, clean air, and healthy wildlife populations. The responsibility for producing these environmental services to the public falls primarily on private individuals. Lacking formal markets, these public benefits may be undervalued or overlooked in decision-making. The first steps in implementation of this strategy have focused on efforts to increase private sector investment in conservation by supporting environmental credit trading and reporting registries. This strategy also includes incorporating market principles into program delivery to increase the benefits produced through public funding. For example, the use of market principles helps align program payment rates with what is needed to offset costs and encourage adoption. Market principles could identify novel approaches to selecting program participants and obtaining the greatest environmental benefit per dollar expended. The value of environmental services produced through conservation on private lands is increasingly recognized and is likely to grow in importance in the context of addressing climate change, energy, and water issues.

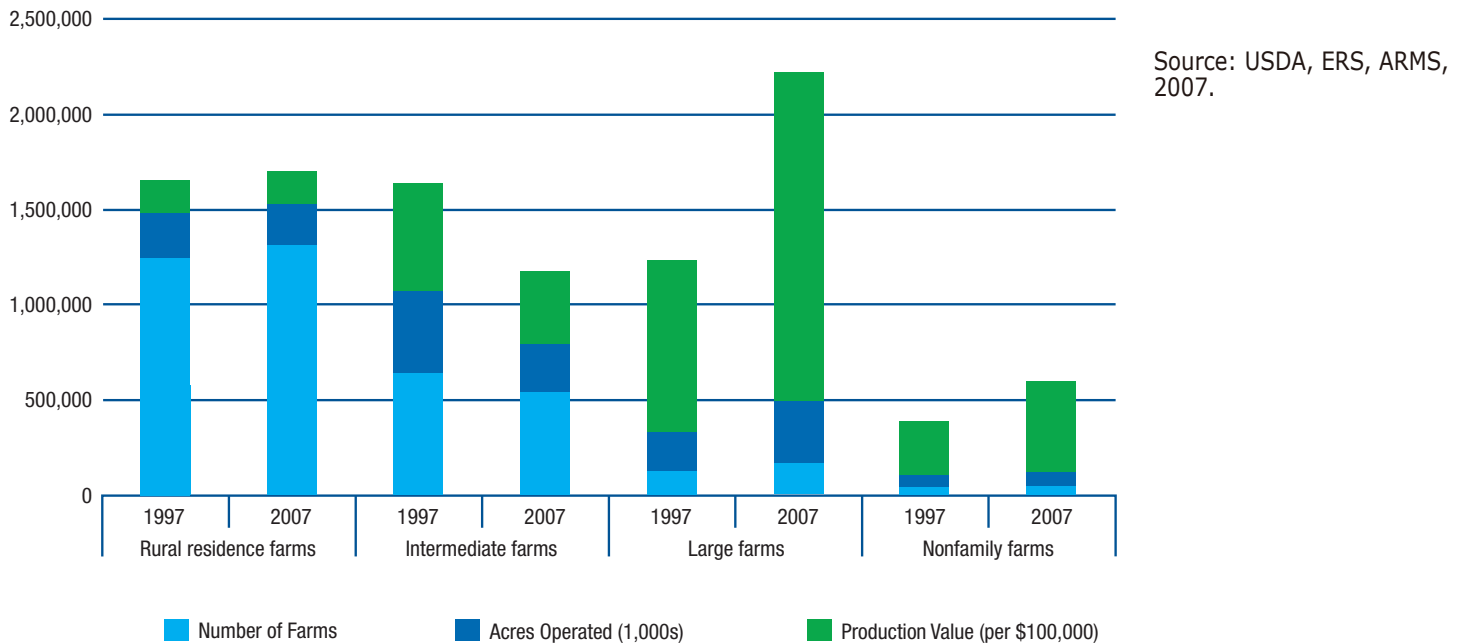
Environmental services markets face many challenges, such as how to address concerns surrounding the permanence of agriculturally produced environmental credits. Quantifying the environmental benefits delivered through conservation practices will be essential for advancing all aspects of the market based approach.



## Business Lines

This strategic planning effort recognizes the continuing change in agricultural structure and the widening divide between small and large family farms. As the conservation customer base shifts, so does the demand for agency products and services (fig. 1). NRCS provides technical and financial assistance to land owners and managers through five business lines. Business lines are groups of similar products and services that agency employees deliver to external customers. We are implementing initiatives in each of our business lines to ensure that these conservation products and services continue to meet our customers' needs.

Figure 1. Farm and Ranch Distribution by Typology Category, 1979-2007.



*The number of large family farms increased by nearly one-third between 1997 and 2007, while the acres operated by this segment increased by more than 60 percent. Operators of larger farms have needs that differ from those of operators of smaller operations.*

**Conservation Planning and Technical Consultation.** Over the next 5 years, we will reengineer planning and financial assistance processes to enable clearer focus on achieving natural resource objectives. The conservation delivery streamlining effort will include revision and integration of field office automated systems and processes to enhance information management. The improved processes will enable field staff to devote more time to helping customers undertake comprehensive conservation planning to sustain and improve the condition of their natural resources. As we work one-on-one with customers, we will help individuals and communities evaluate their operations as part of the wider landscape, considering the effects of the site-specific decisions on users and natural systems downstream and downwind. All planning assistance, regardless of the scale of the planning unit, will be based on ecological principles and will stress integrated management of soil, water, air, plants, and animals, including economic and social factors. All assistance, even that initiated by single-purpose objectives, will adhere to the ecosystem concept by considering related concerns in the planning unit.

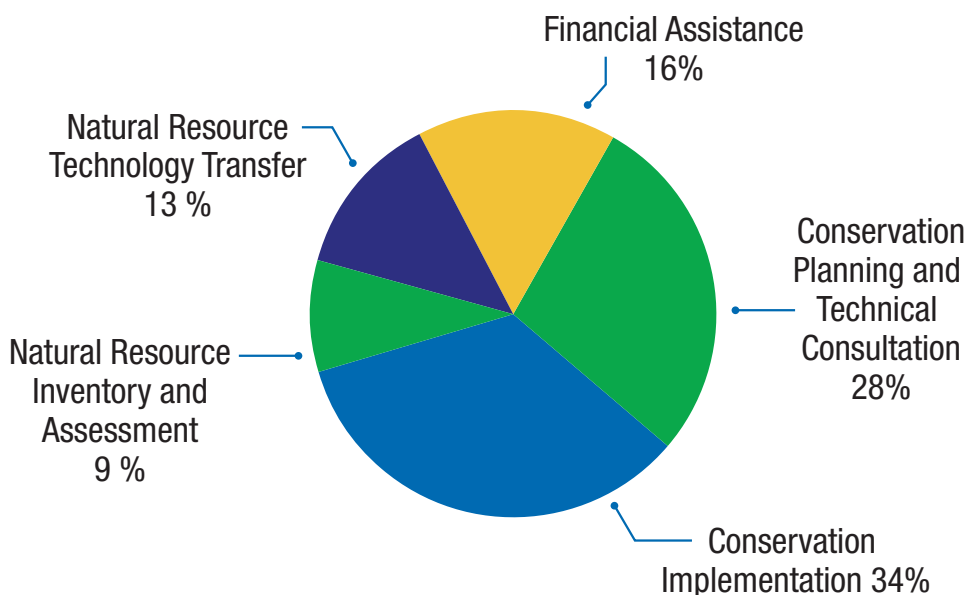
**Conservation Implementation.** Implementation of the watershed approach and adoption of reengineered processes and systems will enhance implementation assistance in the period of this plan. In emphasizing the watershed approach, we will focus on assisting local groups and individuals to get enough conservation applied on the land in a geographic unit to achieve measurable improvements and accomplish their natural resource goals. Streamlining field office processes and tools will reduce the administrative burden on field staff and enable them to provide adequate follow-up to customers, ensuring conservation practice maintenance.

**Natural Resources Inventory and Assessment.** Strengthening our ability to document the effects of conservation practices and systems at the watershed level so that better decisions can be made up front and risk is managed more effectively, is a priority of this business line. We are strengthening cooperation with other Federal agencies, State agencies, and partners to collect and analyze natural resource data. We will ensure that the data we collect is usable at varying scales and compatible with data generated by other entities. Over the next few years, we will use the new information to conduct analyses of policy options and strategies for improving conservation efforts.

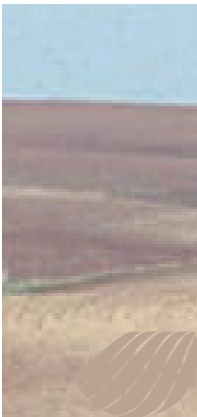
**Natural Resources Technology Transfer.** We are focusing on ensuring that appropriate technology is usable and easily accessible to internal and external customers. For internal customers, our highest priority is the integration of field level tools into a user-friendly system that better supports the conservation planning process. For external customers, we are working to translate science and technology into tools that are easy to understand and easy to use. Our expanding use of the Internet is helping to expedite delivery of agency tools to customers.

**Financial Assistance.** We will ensure that taxpayers receive the optimum return on their investment in conservation by continuing to revise allocation processes and ranking criteria to focus programs on achieving the greatest environmental benefits. We will improve producers' access to financial assistance programs by ensuring that timely information is available, that criteria and requirements are clear, and that the application process is streamlined and user-friendly. We will strengthen internal controls and financial management processes to ensure that they meet internal and external accountability standards (fig. 2).

Figure 2. NRCS Staff Time by Agency Business Line, FY 2008.



Source: NRCS, Conservation Information System Data, 2008.



## Mission Goals

Mission goals articulate in broad terms the benefits the Nation expects from the agency's activities and programs. In the 2005 NRCS Strategic Plan, mission goals were defined in two categories. "Foundation goals" represented long-standing natural resource priorities and were supported by measurable objectives. "Venture goals" represented areas that were expected to grow in importance to the agricultural conservation community, but measurable objectives were not established.



Building on the 2005 effort, this planning effort clarifies and refines the approach to goal-setting. First, the agency mission goals now fully align with the NRCS conservation planning process, directly linking between agency strategic goals and the conservation services provided by front-line employees. Goals, outcomes, objectives, and targets are defined for all five ecological elements that NRCS planners help customers consider the natural resources of soil, water, air, and plants and animals. Second, the issues that were initially called venture goals have been clarified as Strategic Initiatives that will strongly affect resource use and management in the coming years. For climate change and energy, the agency will implement Strategic Initiatives to help people analyze and manage the economic and environmental risks arising from changing conditions in the economy and climate. The third venture goal—working farm and ranch lands—with its focus on sustaining agriculture as a valued component on the landscape, is a tangible representation of the agency's Vision: "Productive Lands, Healthy Environment." Hence, it has been redefined as the framework for the four mission goals rather than as a stand-alone initiative.



## High Quality, Productive Soils

Soil quality describes the capacity of a soil to sustain plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation. High quality soils are the foundation of productive croplands, forest lands, grasslands, and a healthy environment. Controlling erosion, minimizing soil disturbance and compaction, and managing plants and soil organic matter are all essential to maximizing soil quality and function for agricultural and environmental benefits. Although management that protects soil quality is important on all land uses, intensively used soils, associated with the production of annual crops, are most vulnerable to degradation (fig.3, pg. 8).



**Outcome:** The quality of intensively used soils is maintained or enhanced to enable sustained production of a safe, healthy, and abundant food and fiber supply.

**Baseline:** In 2003, 60 percent of cropland was farmed under systems that maintained or increased soil condition and soil carbon.

**2010 Objective:** By 2010, farmers will manage 70 percent of cropland under systems that maintain or improve soil condition and increase soil carbon.

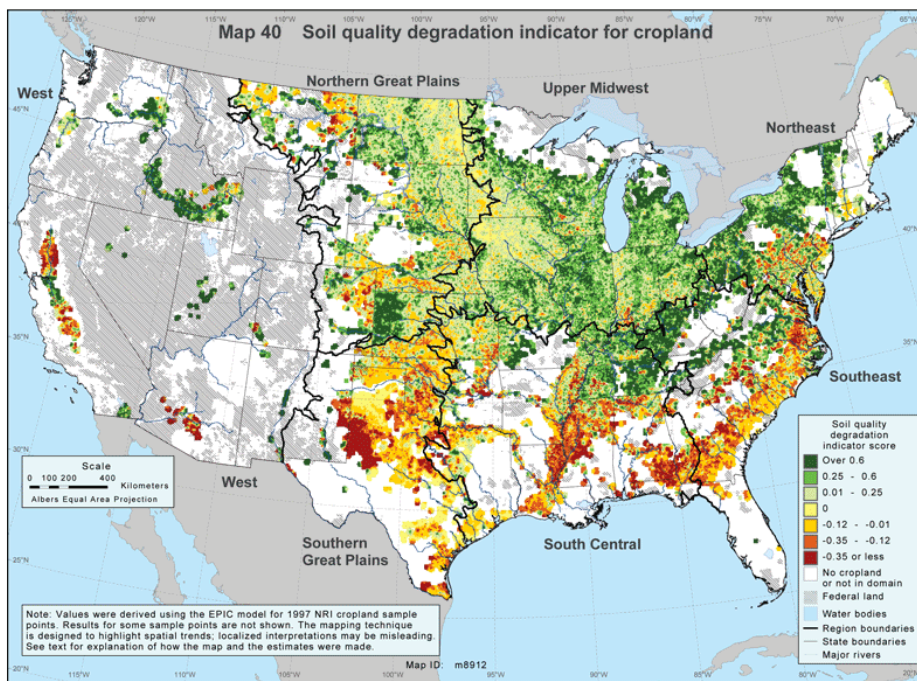
**Progress to Date:** At the end of fiscal year 2008, almost 53 million cropland acres had new conservation measures applied to improve soil quality<sup>1</sup> (fig. 4, pg. 8).

<sup>1</sup>At this time the agency is improving the method to report on soil condition, thus acres treated are reported in this progress report rather than percent of cropland soils with improving condition. The cropland acres with improved condition in 2015 will be reported as a percentage that corresponds to the baseline.



**2015 Objective:** In the period 2011–2015, farmers will sustain the conservation gains made in the previous 5-year period by retaining 70 percent of cropland under systems that maintain or improve soil condition and increase soil carbon. Significant challenges exist to maintain the progress made over the past several years as economic forces are expected to increase pressure to bring potentially sensitive land back into production.

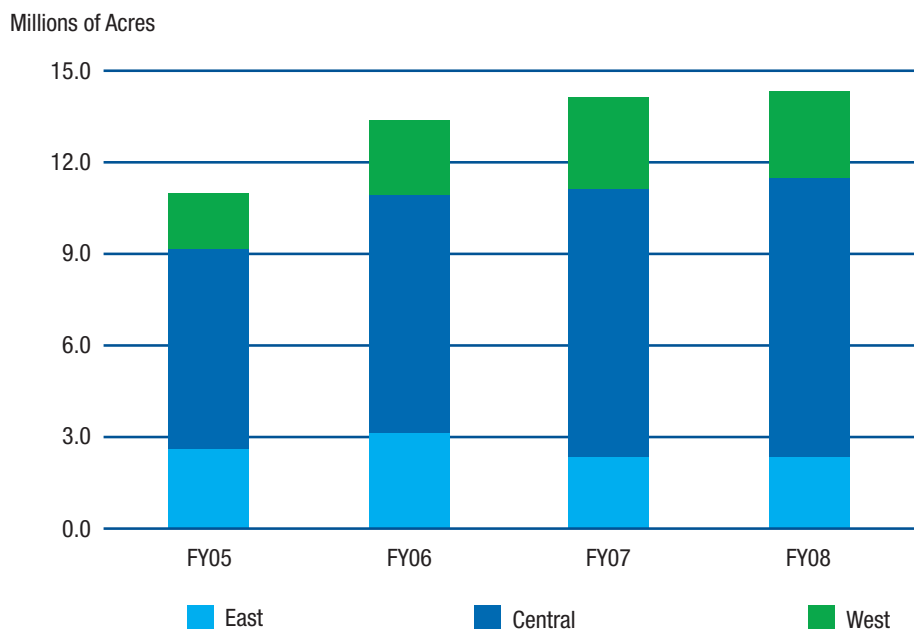
Figure 3. Cropland with Potential Risk for Long-Term Decline in Soil Condition.



Source: USDA, NRCS, Model Simulation of Soil Loss, Nutrient Loss, and Change in Soil Organic Carbon Associated with Crop Production, 2006.

This graphic depicts cropland acres by potential for soil quality degradation over a 30-year period as calculated by Potter, et al. (2006). The value is the difference between the calculation of the soil organic carbon indicator score for the 1st year and the score for the 30th year in the simulation. The lower the score, the greater the potential for soil quality degradation.

Figure 4. Cropland Acres Treated to Improve Soil Quality, FY 2005-2008.

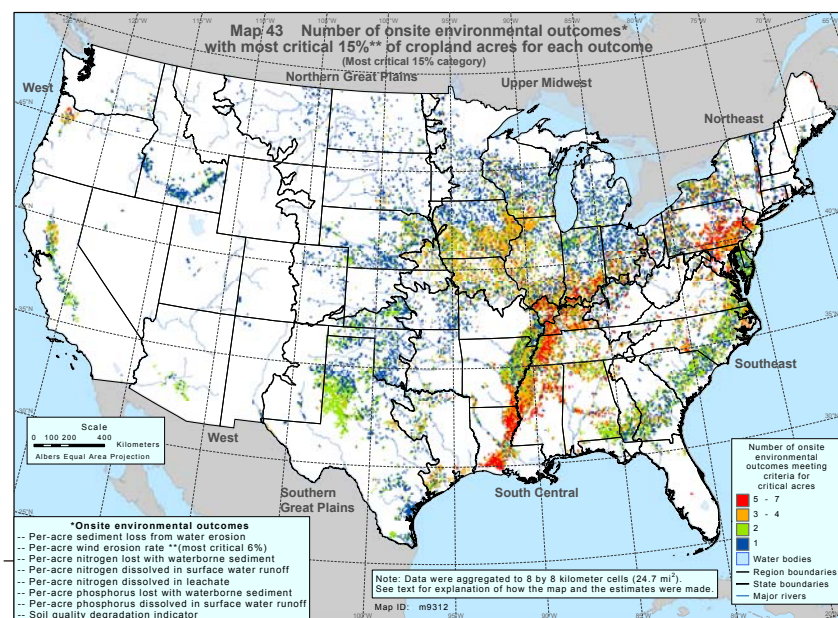


Source: NRCS, Performance Data, <http://ias.sc.egov.usda.gov/PRSHOME/>

## Clean and Abundant Water

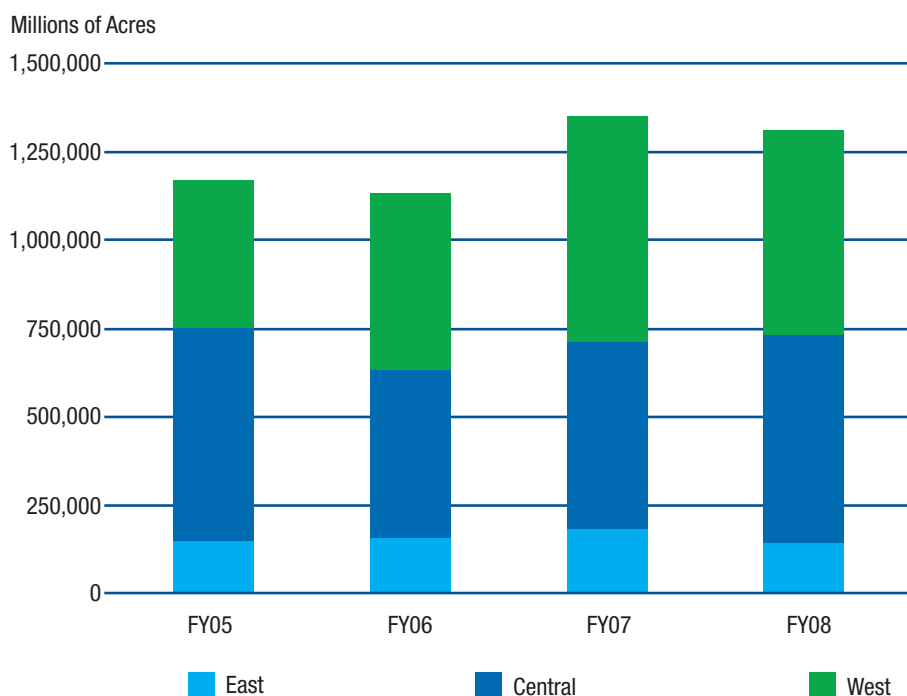
The Nation's abundant freshwater supply is distributed unevenly across the landscape throughout the seasons and from year to year. The quality of ground and surface waters to support intended uses is a continuing concern, as is whether supply can meet expanding demand (fig. 5). Well-managed watersheds are fundamental to ensuring America's private working lands enhance our water resources and are adaptable to climate change. Comprehensive watershed planning, undertaken by local residents and based on local natural resource conditions, provides a basic tool for communities to manage for reliable and adequate supplies of clean water, (fig.6).

Figure 5. Critical Cropland Acres Affecting Water Quality



Source: USDA, NRCS, Model Simulation of Soil Loss, Nutrient Loss, and Change in Soil Organic Carbon Associated with Crop Production, 2006.

Figure 6. Irrigation Water Management Applied, FY 2005-2008.



Source: NRCS, Performance Data, <http://ias.sc.egov.usda.gov/PRSHOME/>

**Outcome:** The quality of surface water and groundwater is improved and maintained to protect human health, support a healthy environment, and enable productive use of the land<sup>2</sup>.

### **Sediment**

**Baseline:** In 2003, potential annual sediment delivery from agricultural operations was 970 million tons.

**2010 Objective:** In the period 2003-2010, agricultural producers will apply conservation measures that reduce potential delivery of sediment by 70 million tons.

**Progress to Date:** An estimate of potential sediment reduction is not currently available.

**2015 Objective:** In the period 2011-2015, agricultural producers will apply conservation measures that reduce potential delivery of sediment by an additional 37.5 million tons.

### **Nitrogen**

**Baseline:** In 2003, potential annual nitrogen delivery from agricultural operations was 6 million tons.

**2010 Objective:** In the period 2003-2010, agricultural producers will apply conservation measures that reduce potential delivery of nitrogen by 375,000 tons.

**Progress to Date:** By the end of fiscal year 2008, agricultural producers had applied conservation measures estimated to reduce potential nitrogen delivery from agricultural operations by 375,000 tons (100 percent of the fiscal year 2010 target).

**2015 Objective:** In the period 2011-2015, agricultural producers will apply conservation measures that reduce potential delivery of nitrogen by an additional 215,000 tons.

### **Phosphorus**

**Baseline:** In 2003, potential annual phosphorus delivery from agricultural operations was 360,000 tons.

**2010 Objective:** In the period 2003-2010, agricultural producers will apply conservation measures that reduce potential delivery of phosphorus by 70,000 tons.

**Progress to Date:** By the end of fiscal year 2008, agricultural operations had applied conservation measures estimated to reduce potential delivery of phosphorous by over 61,000 tons (88 percent of the fiscal year 2010 target).

**2015 Objective:** In the period 2011-2015, agricultural producers will apply conservation measures that reduce potential delivery of phosphorus by an additional 37,500 tons.

In the next 5-year period, challenges to maintaining the rate of improvement will include continued concentration of livestock operations, increased acreage cropped for ethanol, and risk of increased erosion from more intense storm events.

<sup>2</sup>NRCS has established objectives for sediment and nutrient reduction as indicators of the general trend in managing potential agricultural impacts to water quality. We are conducting studies to better determine the effects of conservation practices on water quality. When data are available, the current objectives may be replaced with more comprehensive indicators.



**Outcome:** Water is conserved and protected to ensure an abundant and reliable supply for the Nation.

**Baseline:** In 2005, an estimated 2.5 million acre-feet of water were conserved by practices or management implemented in that year with NRCS assistance. (In 2000, about 36 percent of total water withdrawals were for agricultural purposes – about 160 million acre-feet. This will be updated with 2005 water use data once they are available.)

**2010 Objective:** By 2010, farmers and ranchers will conserve 8 million acre-feet of water<sup>3</sup>.

**Progress to Date:** By the end of fiscal year 2008, farmers and ranchers conserved 5 million acre-feet (62 percent of the 2010 target), using practices or management implemented with NRCS assistance.

**2015 Objective:** In the period 2011-2015, farmers and ranchers will establish conservation measures that conserve an additional 6.25 million acre-feet of water.

Competition for water will continue to increase, especially in areas with limited or variable water supply. Expansion of cropped acres to produce energy feedstocks also may increase agricultural demand for water. Drought and variable precipitation in many parts of the Nation could result in shortages in areas that have had adequate supplies in the past.

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<sup>3</sup>This measure of water conservation reflects the more efficient use of water withdrawn for irrigation purposes through conservation measures designed to apply water more precisely or minimize losses to other pathways. It does not indicate that water is not withdrawn from its source or that it has been made available for other uses. NRCS is continuing efforts to develop an improved measure for water conservation that better reflects the value of sustainable resource management.

## Clean Air

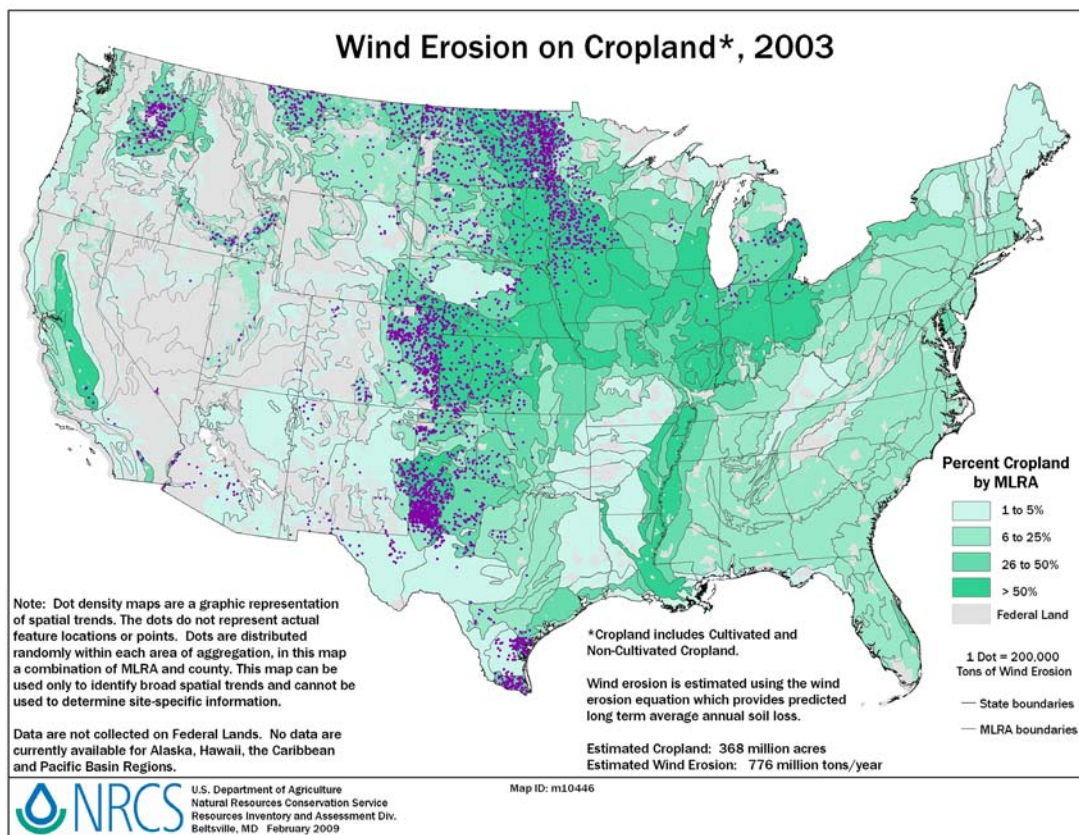
Farmers, ranchers, and their communities are increasingly being challenged to address air resource concerns. A growing number of State and local jurisdictions require farmers and ranchers to control particulate matter ozone precursors, odors, and other emissions related to agricultural operations. Agricultural emissions that can affect air quality include associated wind erosion, prescribed burns, animal confinement, and chemical drift. Agriculture's role in offsetting greenhouse gas (GHG) emissions and developing a robust renewable energy sector is discussed in the "Strategic Initiatives" section of this document.

**Outcome:** Farmers and ranchers make a positive contribution to local air quality.

**Baseline:** In 2003, wind erosion accounted for more than 776 million tons of soil loss from cropland (fig. 7).

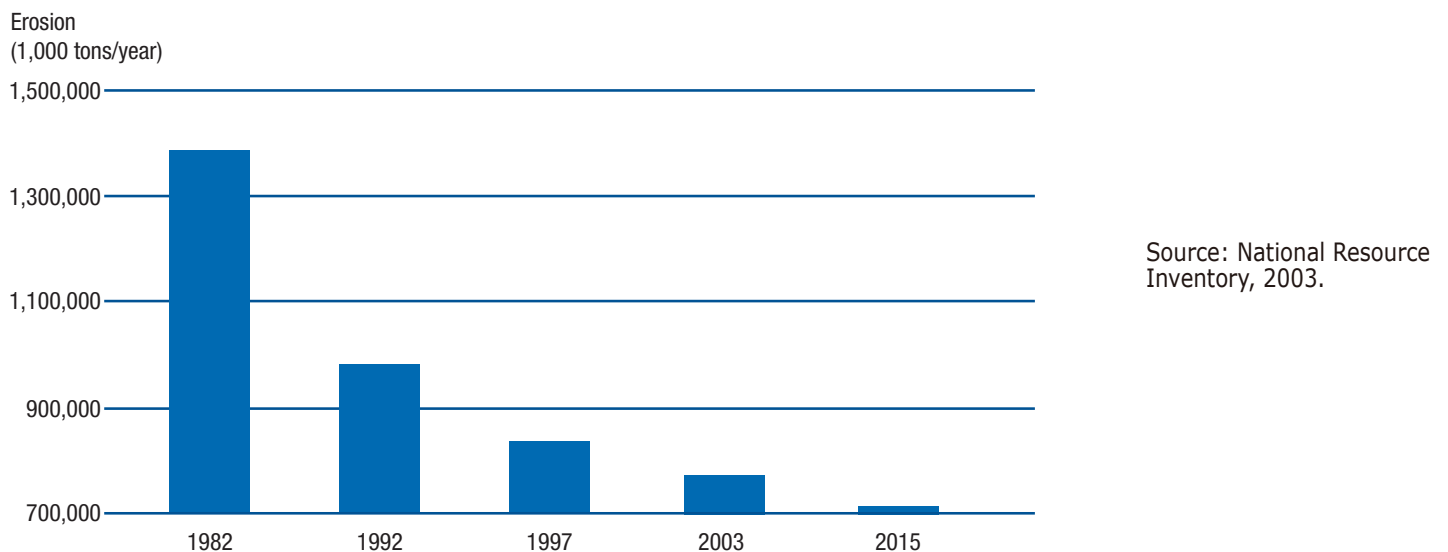
**Objective:** By 2015, farmers and ranchers will apply conservation measures to reduce annual soil losses from wind erosion by 7 percent (fig. 8, pg. 13).

Figure 7. Wind Erosion on Cropland, 2003.



Source: National Resources Inventory, 2003.

Figure 8. Wind Erosion on Cropland, 1982 - 2003, and Projected 2015 Target.



## Healthy Plant and Animal Communities

Healthy plant and animal communities are essential to people's quality of life and economic well-being. Healthy, resilient grasslands are critical to viable grazing operations, as well as important to wildlife populations. Sustaining plant and animal communities requires landscape-scale attention, recognizing the relationships between plant and animal species and the physical features and processes of their environment. Habitat loss, degradation, and fragmentation are among the primary risks faced by the Nation's wildlife.

**Outcome:** Grassland, rangeland, and forest ecosystems are productive, diverse, and resilient.

**2010 Objective:** By 2010, farmers, ranchers, and non-industrial private forest landowners will apply management that will maintain or improve long-term vegetative condition on 150 million acres of grazing and forest land.

**Progress to Date:** By the end of fiscal year 2008 (fig.9, pg.14), farmers, ranchers, and non-industrial private forest landowners have applied management that will maintain or improve long-term vegetative condition on 111 million acres (74 percent of the 2010 target).

The current strategic planning effort separates this objective into distinct grassland and forestland outcomes and objectives for 2015.

**Outcome:** Grassland and rangeland ecosystems are productive, diverse, and resilient and provide a wide variety of environmental services.

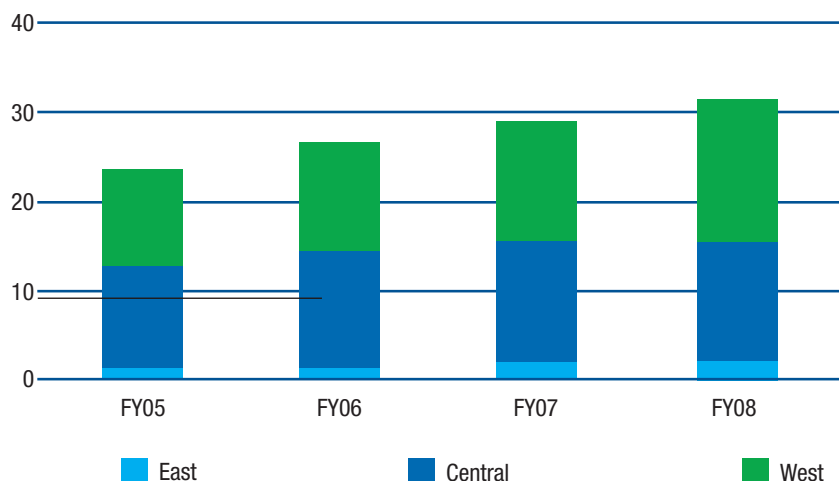
**Baseline:** In 1999, about 300 million acres of non-Federal grazing land were considered to be in minimal or degrading vegetative condition.



**2015 Objective:** In the period 2011-2015, farmers, ranchers, and other landowners will apply management that will maintain or improve long-term vegetative condition on 150 million acres of grazing land.<sup>4</sup>

Figure 9. Grazing Land with Conservation Applied, FY 2005-2008.

Millions of Acres

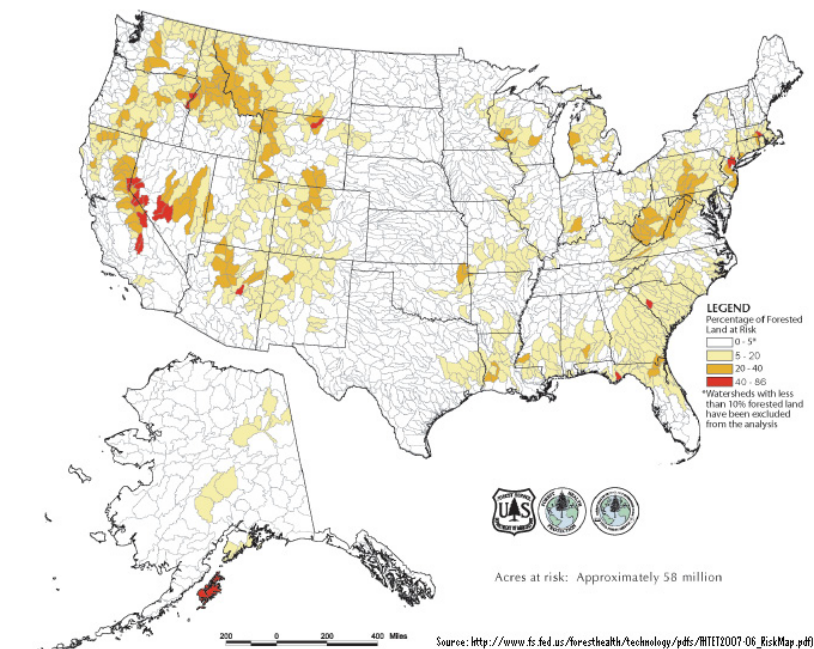


Source: NRCS, Performance Data, <http://ias.sc.egov.usda.gov/PRSHOME/>

**Outcome:** Healthy forest lands that are productive, diverse, and resilient, and provide a wide range of ecosystem services.

**Baseline:** In 2003, an estimated one-half (200 million acres) of non-industrial private forestland was considered to have minimal or degrading vegetative condition due to overstocking, invasive species, wildfire damage, insects, hurricane damage, or other factors, (fig.10).

Figure 10. Forested Land at Risk from Insects or Disease, 2006.



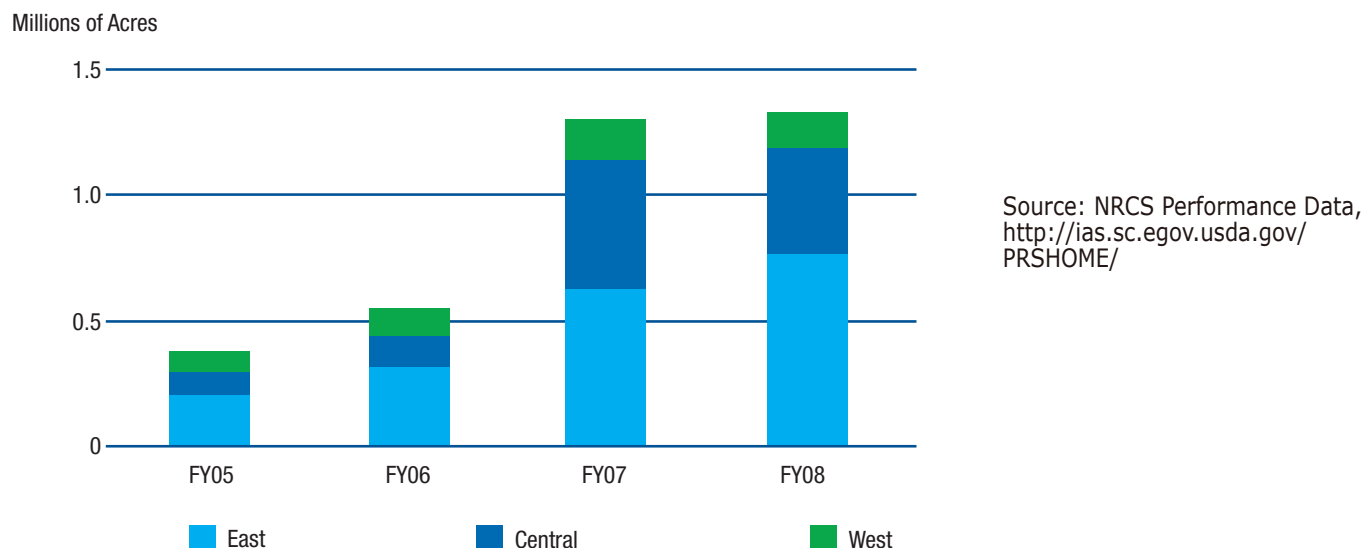
Source: [http://www.fs.fed.us/foresthealth/technology/pdfs/FHTET2007-6\\_RiskMap.pdf](http://www.fs.fed.us/foresthealth/technology/pdfs/FHTET2007-6_RiskMap.pdf)

*This graphic presents 8-digit watersheds by the percentage of forested land at risk. Private, State, and county forest lands, found predominantly in the eastern United States, account for almost one-half of the 58 million acres of forestland potentially at risk from insects and disease. While native and non-native pests are a major threat to forest health, wildfire, fragmentation, and climate change also challenge the condition of the forest resource.*

<sup>4</sup>The target reflects the acres on which conservation is applied. These may not be unique acres of land because several years of activity may be needed to attain the desired level of conservation management. The unique acres will improved condition in 2015 will be less than the aggregate of acres where treatment was applied during the period reported.

**Progress to Date:** By the end of Fiscal Year 2008, 3.8 million acres of non-industrial private forestland had conservation practices applied that will maintain or improve the vegetative condition, (fig.11).

Figure 11. Forestland with Conservation Applied, FY 2005 - 2008.



**2015 Objective:** In the period 2011–2015, non-industrial private forest landowners will apply management that will maintain or improve vegetative condition and protect and enhance ecosystem services on 9 million acres of non-industrial private forest land that are considered to have minimal or degrading vegetative conditions.

**Outcome:** Working lands and waters provide habitat for diverse and healthy wildlife, aquatic species, and plant communities.

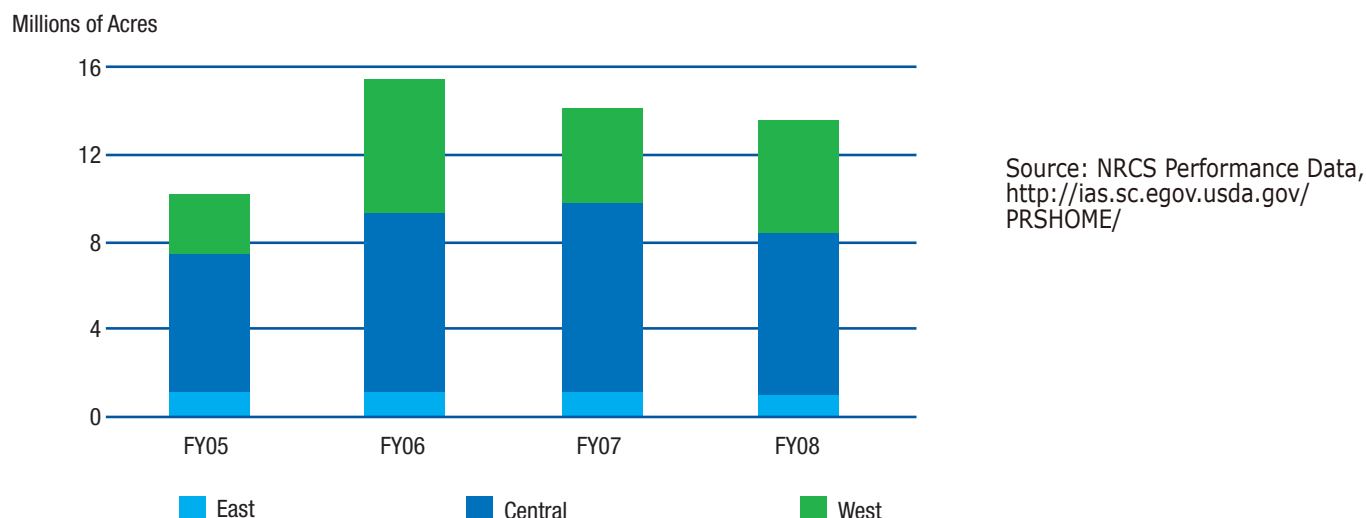
**Baseline:** In 2005, farmers, ranchers, and other landowners and managers improved habitat for at-risk or declining species on 2 million acres.

**2010 Objective:** By 2010, an additional 9 million acres of essential habitat will be improved and managed to benefit at-risk or declining species.

**Progress to Date:** By the end of fiscal year (FY) 2008, 7.2 million acres (80 percent of FY 2010 target) of essential habitat was improved to benefit at-risk or declining species, (fig. 12).

**2015 Objective:** In the period 2011–2015, farmers, ranchers, and non-industrial private forest landowners will implement conservation measures to improve an additional 8.5 million acres of essential habitat to benefit at-risk or declining species.

Figure 12. Non-Federal Land with Conservation Applied to Improve Wildlife Habitat, FY 2005-2008.



*This graph reflects the total acres on which conservation was applied to improve wildlife habitat, which includes those acres of land treated to benefit at-risk or declining species. An improved method for tracking and reporting acres treated to benefit these species is under development.*

**Outcome:** Wetlands provide high quality habitat for migratory birds and other wildlife, protect water quality, and reduce flood damages.

**Baseline:** In 2003, there were 111 million wetland acres on non-Federal lands in the contiguous United States.

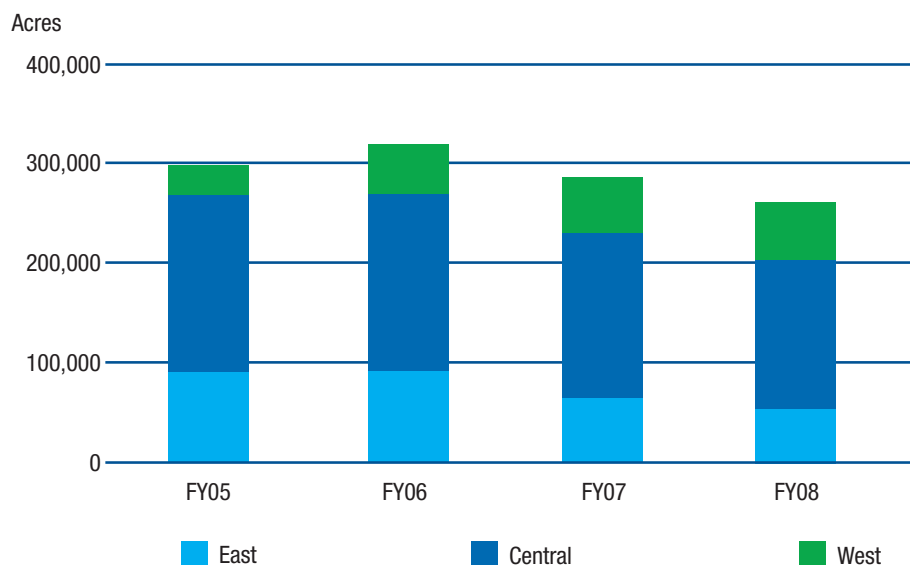
**2010 Objective:** By 2010, farmers and ranchers, with NRCS assistance, will create, restore, or enhance 1.5 million acres of wetlands on non-Federal lands.



**Progress to Date:** By the end of FY 2008, 1.16 million acres (77 percent of FY 2010 target) of wetlands had been created, restored, or enhanced, (fig. 13).

**2015 Objective:** In the period 2011-2015, farmers and ranchers will create, restore, or enhance an additional 1.25 million acres of wetlands on non-Federal lands.

Figure 13. Wetlands Created, Restored or Enhanced by FY 2005-2008.



Source: NRCS Performance Data,  
<http://ias.sc.egov.usda.gov/PRSHOME/>

## Strategic Initiatives

NRCS is adopting Strategic Initiatives to address national priorities that have conservation dimensions and are of vital importance to the agriculture and forest sectors. Strategic Initiatives are core considerations in conservation planning and implementation, driving continuing advances in the products and services of all our business lines. Strategic Initiatives replace the more tentative venture goals of the 2005 Plan, based on recognition that these issues cannot be addressed as discrete topics but have potential to impact all natural resources. Implementing these initiatives will enhance performance in achieving our four mission goals and will also support the Secretary's corporate goals for national leadership in climate change mitigation and adaptation. This includes emphasis on conservation and greater efficiency in energy use, as well as greater emphasis on biofuels and renewable energy.

### Climate Change Adaptation and Mitigation

Agricultural activities account for a small share of total U.S. GHG emissions, primarily associated with nitrous oxide and methane emissions from soil amendment management, livestock production, and to a lesser extent rice cultivation. Careful management can minimize even these slight contributions. Agriculture also has a role to play in offsetting GHG emissions and developing a robust biomass sector. In 2005, agriculture and forest sectors were reported as sequestering an estimated 820 Tg of CO<sub>2</sub> equivalents (904 million tons CO<sub>2</sub>e), (fig. 14, pg. 18). With expansion of environmental services markets, much greater attention is being given to carbon stored in soils and biomass. We are implementing actions to help agriculture and forestry: (1) adapt to increasing natural system variability that climate change and climate variability can cause, and (2) minimize or mitigate contributions to U.S. GHG emissions.

**Initiative:** Assist farmers, ranchers, and forestland owners and communities in adopting conservation measures to mitigate or adapt to the impacts of natural system variability associated with climate change.

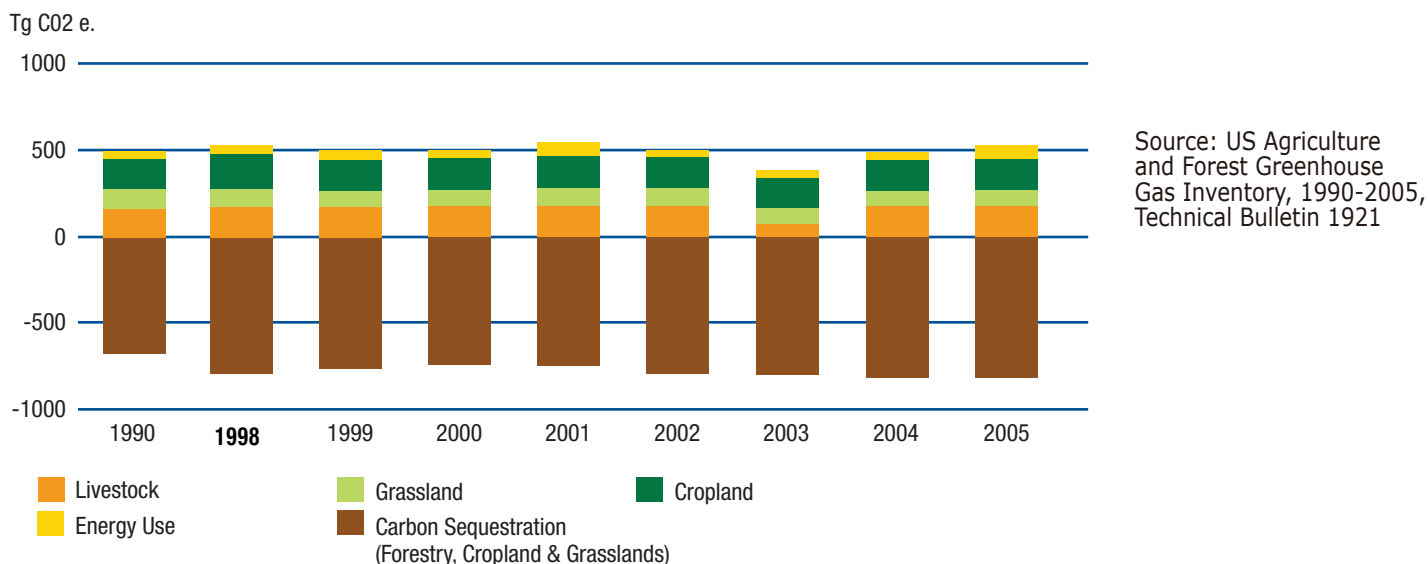
**Performance:** Conservation practices adopted to protect resources in current weather conditions are even more valuable as a changing climate may impose more severe and less-predictable conditions. We have helped producers apply tillage and cropping systems that provide protection against storm events. To ensure that the practices provide adequate protection, we have updated our erosion prediction models to reflect the most recent weather data.

**Initiative:** Assist farmers, ranchers, and forestland owners to increase carbon sequestration in agricultural soils, forests, and other perennial vegetation.

**Performance:** Since identifying climate change as a concern in the 2005 plan, we have:

- Developed a course, Air Quality, Climate Change, and Energy and made it available through AgLearn to help NRCS conservation professionals and other conservation partners and planners.
- Solicited comments from the public on how we can better manage Farm Bill programs to facilitate participants adopting methods to mitigate climate change, conserve energy, and reduce net carbon emissions.
- Investigated native plants with a greater above- and below-ground biomass with potential for sequestering more carbon and reducing the amount of atmospheric carbon dioxide.

Figure 14. Agriculture and Forestry Greenhouse Gas Emissions and Offsets, FY 1990-2005.



## Energy Conservation and Sustainable Production

Agriculture is both a consumer and a producer of energy. Higher fuel costs and fluctuating energy supplies are encouraging a new look at on-farm energy conservation, energy efficiency, and production of renewable energy. An estimated one-quarter of all farmers took some action to reduce fuel or fertilizer expenses in 2006. Farm energy audits helped provide necessary information on how to conserve energy and pursue the use of more energy efficient equipment and practices. Managing inputs, such as fertilizer, and employing energy efficient farming practices, such as reduced tillage and installing new energy efficient technologies, can help reduce energy use on the farm. Increasing emphasis on renewable energy has encouraged farmers to participate in alternative energy markets. In 2006, nearly 4,000 farm operators produced crops, primarily corn, solely for energy purposes. While the pace of the growth of the ethanol market is expected to slow, it is projected to continue to expand over the next decade, with corn remaining the primary feedstock due to target levels mandated by the Energy Independence and Security Act of 2007. Increased production of energy from agricultural lands whether corn or cellulosic ethanol, biomass, or wind entails potential risks to the resource base if not carefully managed. Agency initiatives will assist agricultural producers and forestry managers to conserve energy, implement energy efficient practices and technologies, and become a source of environmentally sustainable renewable energy. (figs. 15a, 15b, pg.20).

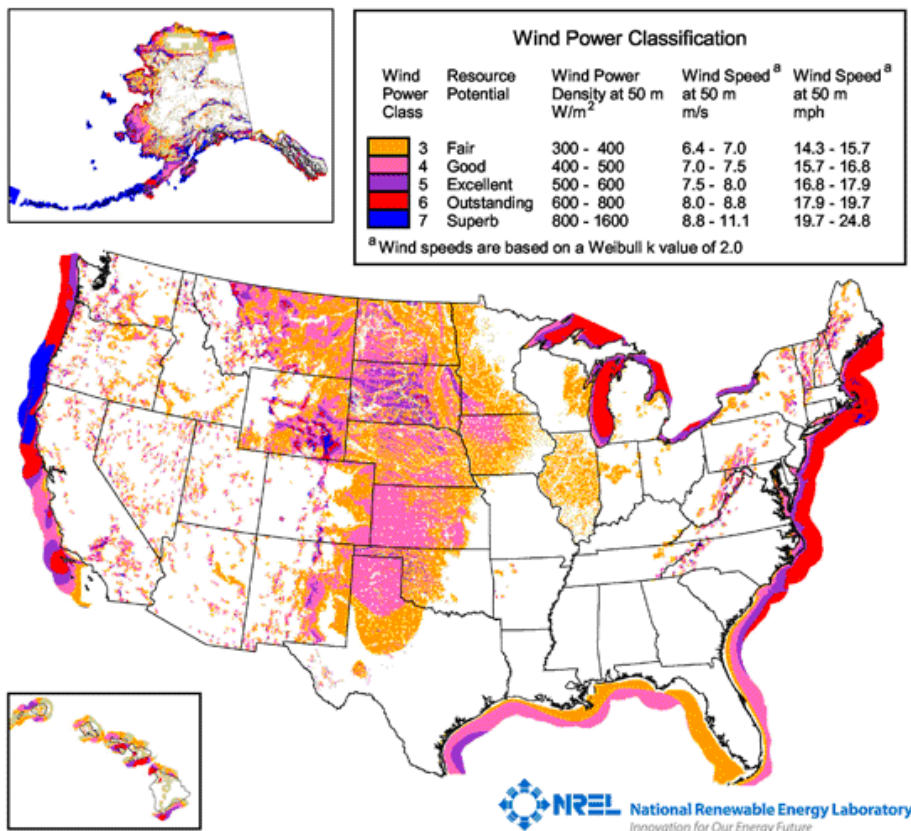
**Initiative:** Assist farmers, ranchers, and forestland owners to adopt energy-conserving conservation practices and technologies while producing a secure and sustainable food and fiber supply.

**Performance:** We have developed a series of Web-based tools to help producers evaluate the energy savings associated with alternative management practices. Tools include energy estimators for tillage, nitrogen, irrigation, and animal housing. We have also made available to our customers farm energy audits, which provide a comprehensive evaluation farm energy use and provide energy saving recommendations.

**Initiative:** Assist operators to implement environmentally sustainable systems for the production of renewable energy resources that are compatible with sustaining a secure food supply and high quality environment.

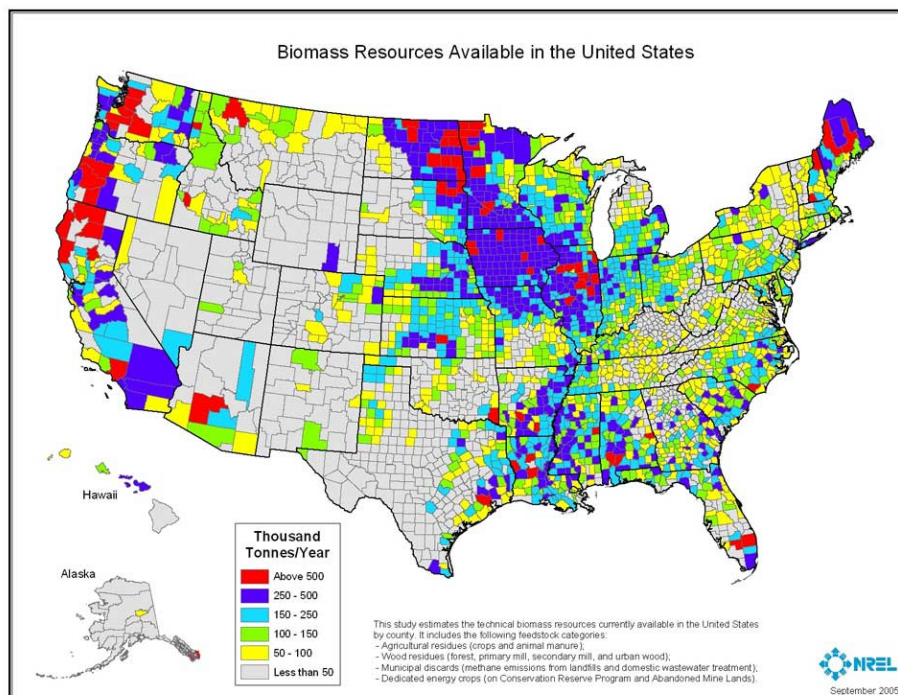
**Performance:** We have funded methane digesters, solar powered fencing, and solar and wind-powered watering facilities for livestock through our financial assistance programs. These types of conservation practices enable producers to redirect common by-products found on the farm into renewable energy resources.

Figure 15a. Wind Resource Potential at 50 m above Ground on Land and Offshore, 2008.



Source: U.S. Department of Energy, National Renewable Energy Lab

Figure 15b. Biomass Resources Available in the United States (Agriculture, Forest, and Municipal Discards).



Source: U.S. Department of Energy, National Renewable Energy Lab



## Management Initiatives

Management Initiatives describe broad priorities for ensuring organizational excellence.

Good management of internal business processes and agency resources is essential for efficient program operations, high quality customer service, and effective use of taxpayers' investment. This planning effort presents these priorities under three initiative areas.

### Civil Rights

We are committed to establishing an equal opportunity standard for excellence and creating a culturally diverse work force by delivering fair and equitable service to all customers. We will conduct expanded outreach activities to members of traditionally underserved groups and strengthen partnerships with entities who serve such groups in order to meet the standards of performance we expect of ourselves.

### Fair and Equitable Service Delivery

NRCS is committed to providing equitable service to all customers regardless of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information.

**Expectation:** NRCS will strive to provide parity in service delivery.

**Recent Performance:** In fiscal years 2005 through 2008, the available data indicate that, on a national basis and for all NRCS programs, the percentage of minority customers who received services was slightly lower than the percentage of non-minority customers. However, NRCS does not have complete data on the demographics of customers receiving assistance. Customers self-identify membership in protected groups; not all customers provide that information. In addition, NRCS definitions and reporting methods are not fully consistent with those of the Census of Agriculture, which is the source of information on the potential customer base. To correct customer data gaps in USDA Service Centers, USDA will fully implement automated corporate data collection of race, ethnicity, sex, national origin, disability, and age for all USDA Service Centers by October 1, 2009.

In administering its financial assistance programs, NRCS has focused attention on ensuring that historically underserved groups are aware of and have opportunities to participate in its programs. Data for the Environmental Quality Incentives Program, our largest financial assistance program, indicate that slightly higher percentages of minority customers than of non-minority customers have received assistance each year in fiscal years 2005 through 2008.

## **Equal Employment Opportunity**

It is NRCS' policy to achieve a culturally diverse work force that provides services to a varied and changing population. A diverse work force is one that reflects Department of Labor statistics on the makeup of the Nation's civilian labor force and that values differences such as cultural background, race, color, age, sex, national origin, disability, religion, or marital status at all levels of the organization. Valuing diversity means recognizing that individuals are different and that diversity is an advantage if nurtured and well managed, and it means changing behavior and systems to nurture the richness of differences.

**Expectation:** The agency workforce will closely resemble the diversity of the Nation's labor force.

**Performance:** White males make up a significantly larger percentage of the NRCS workforce than of the Nation's civilian labor force. White males make up 39.03 percent of the civilian labor force, according to the 2000 Census, but made up 56.2 percent of NRCS' total workforce at the end of fiscal year 2008. NRCS has established a goal of reducing that 17.17 percent differential. Because the workforce is not increasing in numbers, the diversity of the workforce can change only slightly from year-to-year as employees leave and new hires arrive. In 2008, the reduction in the differential was only 0.41 percent, but the change continues the long-term trend toward slightly increasing diversity.

An indication of the degree to which the agency values diversity is provided in the Best Places to Work in the Federal Government report produced on a 2-year cycle by the Partnership for Public Service and American University's Institute for the Study of Public Policy Implementation. This survey includes a ranking of the extent to which employees believe that actions and policies of leadership and management promote and respect diversity. On this category of the 2007 study, NRCS ranked 8 among the 222 agency subcomponents rated for the survey.

## Human Resources

Our employees are our primary asset. Our success depends upon the technical expertise of our employees and upon their ability to work cooperatively with conservation partners and volunteers to meet the varying needs of our diverse customer base. We are evaluating our agency structure, in the field and at National Headquarters, to see whether we are organized in a way that allows us to be nimble in addressing change and to be successful in meeting our financial, programmatic, and strategic objectives. The focus of this evaluation at the field level is to ensure that technical staff are able to focus on conservation delivery. We will conduct a definitive work force planning effort to ensure we have the right skills as our customers needs change and as experienced staff reach retirement age.

**Expectation:** Ensure that our workforce is in the right locations and has the right skills.

**Recent Performance:** On the 2007 Best Places to Work survey, NRCS ranked 34th of 222 entities on the training and development category, which gauges the extent to which employees believe their development needs are assessed and appropriate training is offered, allowing them to do their jobs effectively and improve their skills.

**Expectation:** Agency managers and supervisors at all levels will enable a high performance workforce by creating and maintaining a culture and climate that welcomes diversity, encourages innovation and self-development, and rewards creativity and achievement.

**Recent Performance:** The agency scorecard for management improvement includes an objective to continually improve its score on the Best Places to Work survey. In 2007, employees gave the agency high marks overall and on specific items. Overall, the agency ranked 44th of the 222 agency subcomponents rated. NRCS was 59th in the employee skill/mission match category, which measures the extent to which employees feel that their skills and talents are used effectively.

## Accountability

The public investment in conservation through programs administered and delivered by NRCS has increased substantially. NRCS is committed to raising its level of financial accountability and ensuring programs achieve intended results and measurable objectives. The 2005 Strategic Plan presented management initiatives on improving internal management, electronic government, financial performance, and budget performance integration. These are brought together under this initiative.

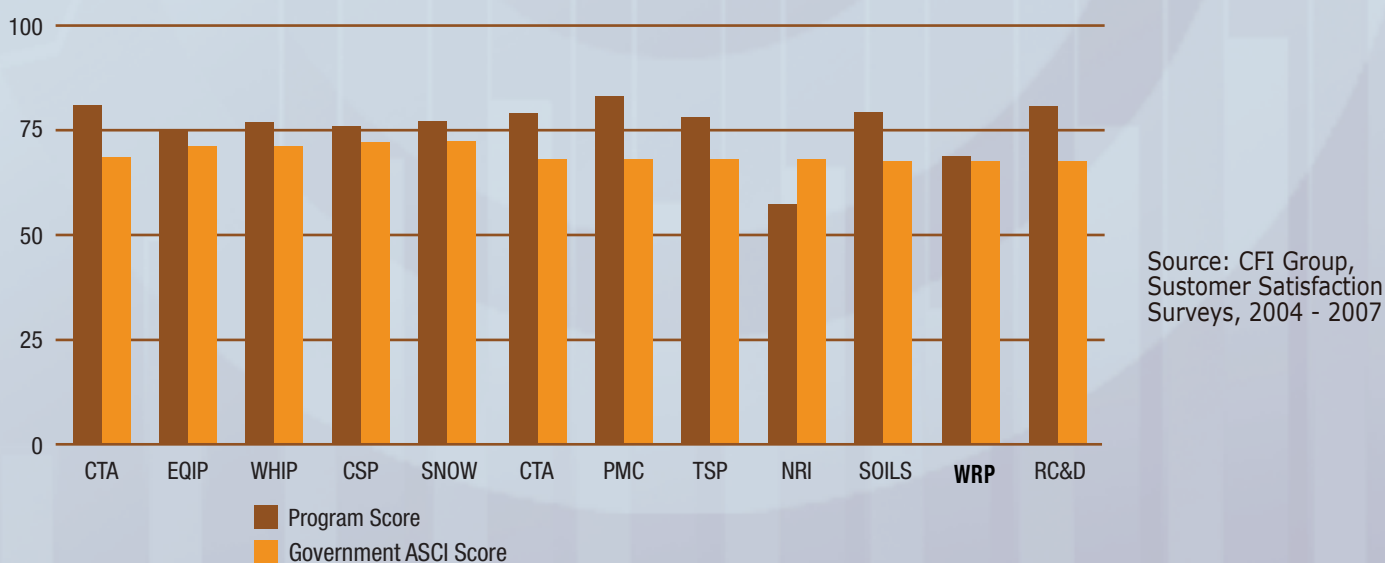
**Expectation:** Agency business processes and internal controls ensure financial accountability and that programs achieve intended results and measurable objectives.

**Recent Performance:** In fiscal year 2008, the NRCS budget for the first time reached the level at which an annual, agency-specific audit of funds is required. The independent audit found current financial information insufficient to express an opinion about the state of our financial records. Immediately upon receiving this finding, NRCS reviewed all financial agreements to correct existing deficiencies and is taking action to ensure that problems do not recur. The agency is committed to receiving a clean audit in future years. This includes implementing, updating, or developing policies and tools that will help us operate within standard accounting principles and providing additional training to employees.

**Expectation:** American Customer Satisfaction Survey Index (ACSI) scores for agency programs equal or exceed the average score received by the Federal Government.

**Performance:** A primary indicator of effective management is the degree to which customers are satisfied with the services they receive. The ACSI is a national survey of customer evaluations of the quality of goods and services available to U.S. residents. In fiscal years 2004 through 2007, 11 ACSI surveys of NRCS programs were conducted, (fig. 16). Of these, the score for all but one equaled or exceeded the average Federal Government score. Most NRCS scores exceeded the average Federal score by considerable amounts. The exception was the 2006 survey of the National Resources Inventory (NRI), which did receive high marks in many specific questions on the survey. Customers of the NRI are primarily Federal Government employees or other analysts; the primary customers of most NRCS programs are agricultural producers.

Figure 16. Customer Satisfaction-Selected Conservation Programs, FY 2004-2007.



ACSI is produced by the University of Michigan in partnership with Claes Fornell International (CFI) Group, and the American Society for Quality. ACSI measures satisfaction for private sector entities and Federal Government agencies.



## Appendix

### Linkage of NRCS Strategic Plan Update to USDA Strategic Plan for FY 2010-2015

USDA Strategic Goal/Objective	Agency Strategic Goal	Key Outcome	Agency Objectives
<b>USDA Strategic Goal 2:</b> Ensure our Nation's forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.			
<b>USDA Strategic Objective 2.1:</b> Restore and conserve the Nation's forests, farms, and grasslands.	<b>Agency Goal:</b> High Quality, Productive Soils	<i>Soil Quality:</i> The quality of intensively used soils is maintained or enhanced to enable sustained production of a safe, healthy, and abundant food and fiber supply.	<i>Objective:</i> By 2015, farmers will sustain the gains made in the previous 5-year period by retaining 70 percent of cropland under systems that maintain or improve soil condition and increase soil carbon.
	<b>Agency Goal:</b> Healthy Plant and Animal Communities	<i>Grasslands:</i> Grassland and rangeland ecosystems are productive, diverse, and resilient and provide a wide variety of environmental services.	<i>Objective:</i> By 2015, farmers, ranchers, and other landowners will apply management that will maintain or improve long-term vegetative condition on 150 million acres of grazing land.
		<i>Forest Ecosystem:</i> Healthy forest lands that are productive, diverse, resilient, and provide a wide range of ecosystem services.	<i>Objective:</i> By 2015, non-industrial private forest landowners will apply management that will maintain or improve vegetative condition and protect and enhance ecosystem services on 9 million acres of non-industrial private forest land that are considered to have minimal or degrading vegetative condition.

<b>USDA Strategic Goal/Objective</b>	<b>Agency Strategic Goal</b>	<b>Key Outcome</b>	<b>Agency Objectives</b>
		<i>Fish and Wildlife Habitat:</i> Working lands and waters provide habitat for diverse and healthy wildlife, aquatic species, and plant communities.	<i>Objective:</i> By 2015, farmers, ranchers, and non-industrial private forest landowners will implement conservation measures to improve an additional 8.5 million acres of essential habitat to benefit at-risk or declining species.
<b>USDA Strategic Objective 2.2:</b> Lead efforts to mitigate and adapt to climate change.	<b>Agency Goal:</b> Clean Air	<i>Air Quality:</i> Farmers and ranchers make a positive contribution to local air quality.	<i>Objective:</i> By 2015, farmers and ranchers will apply conservation measures to reduce annual soil losses from wind erosion by 7 percent.
<b>USDA Strategic Objective 2.3:</b> Protect and enhance America's water resources.	<b>Agency Goal:</b> Clean and Abundant Water	<i>Water Quality:</i> The quality of surface water and groundwater is improved and maintained to protect human health, support a healthy environment, and enable productive use of the land.	<i>Objective:</i> By 2015, agricultural producers will apply conservation measures that reduce potential delivery of sediment and nutrients from their operations. <ul style="list-style-type: none"> <li>• Agricultural producers will apply conservation measures that reduce potential delivery of sediment by an additional 37.5 million tons.</li> <li>• Agricultural producers will apply conservation measures that reduce potential delivery of nitrogen by an additional 215,000 tons.</li> <li>• Agricultural producers will apply conservation measures that reduce potential delivery of phosphorus by an additional 37,500 tons.</li> </ul>
		<i>Water Quantity:</i> Water is conserved and protected to ensure an abundant and reliable supply for the Nation.	<i>Objective:</i> Farmers and ranchers will establish conservation measures that conserve an additional 6.25 million acre-feet of water.

USDA Strategic Goal/Objective	Agency Strategic Goal	Key Outcome	Agency Objectives
	<b>Agency Goal:</b> Healthy Plant and Animal Communities	<i>Wetlands:</i> Wetlands provide high quality habitat for migratory birds and other wildlife, protect water quality, and reduce flood damages.	<i>Objective:</i> By 2015, farmers and ranchers will create, restore, or enhance an additional 1.25 million acres of wetlands on non-Federal lands.

The background is a solid blue color. Overlaid on this is a large, stylized, light blue letter 'A' that is semi-transparent. Behind the 'A' and across the entire page is a faint, light blue line graph showing an upward trend. The graph consists of several vertical bars of varying heights and a line connecting the tops of these bars, starting from the bottom left and rising towards the top right.

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